From: <u>Dee Homans</u>
To: <u>Jones, Pamela, ENV</u>

Subject: [EXTERNAL] Waste Water Reuse rule
Date: Tuesday, May 14, 2024 2:39:13 PM

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

We are urging the NMED to rethink the Reuse Regulations for produced water. As we understand it "produced water" is not really water at all, but should be more accurately named "oil and gas industry waste" due to the amount of contaminants—radioactive and other—that it contains. We also understand that it will be very difficult, if not impossible, to purify that waste and make it safe for agricultural, industrial or residential use; There are no peer-reviewed studies which indicate how to do that or that reuse is safe.

Furthermore we understand that given the fact that the Reuse Rule lacks specific standards for treatment of the waste, NMED will be virtually stripped of its ability to decide whether or not the waste has been adequately treated and to deny any application for its use.

We urge you to adopt a rule that not only prohibits discharging produced water into our rivers, lakes or groundwater but has strong safeguards against produced water being reused outside of the oil fields.

It is imperative that in order to slow down manmade climate change, we lessen our dependence on fossil fuels. Equally important is that we conserve and safeguard our water supply. The Waste Water Reuse Rule seems designed to make fracking seem less harmful to the environment and more benign than it has been shown to be.

Sincerely, Dee Homans and Andrew Davis, P.O. 1354, Santa Fe, NM 87504

From: <u>Kristin Graziano</u>
To: <u>Jones, Pamela, ENV</u>

Subject: [EXTERNAL] Docket WQCC 23-84 (R) Comments for Produced Water Rule

Date: Tuesday, May 14, 2024 3:36:33 PM

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Greetings Ms. Jones,

I am in full support of prohibiting the discharge of oil and gas wastewater, i.e produced water, (whether treated or untreated) to surface and groundwater. We do not have sufficient data to prove the safety of such a water source to humans, flora and fauna, and our water systems. As a family physician and an outdoor enthusiast, the well-being of my patients and community, along with the well-being of our environment, is paramount.

I have similar safety concerns for demonstration projects and industrial uses. The strictest of safety regulations must be enacted.

Lastly, I am confused as to why there are definitions within the rule that do not relate to the current rule being debated. For example, terms such as "agriculture application" and "flood irrigation application" are not necessary and should be removed.

Thank you for considering my comments and for bringing this issue to the public.

Sincerely, Kristin Graziano, DO, MPH Arroyo Seco, NM From: Betsy Diaz

To: Jones, Pamela, ENV

Subject: [EXTERNAL] Public Comment re; Produced Water

Date: Tuesday, May 14, 2024 8:45:20 PM

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

To the committee hearing information re: regulations for NM Produced Water:

Produced water needs regulations that are precisely clear, provide restrictions for produced water that effectively protect what remains of NM's clean water supplies, with proper monitoring and provisions for timely relevant corrections & cleanup of violations.

Produced water should not be discharged into the ground in or near aquifers which provide drinking water as there is not enough scientific evidence that this will not contaminate precious sources of drinking water. There remains too much risk of spills, accidents or possible discharges of contaminated water as well as a lack of sufficient evidence proving that continuing use of produced water in industrial settings is safe. NM's water work should be focused on supporting clean energy resources to protect our climate, watersheds & communities.

Unnecessary definitions which serve no purpose in produced water regulations should be removed as they serve no regulatory purpose leading to confusing public perception of the regulations. Discharge of produced water to the land does require protective regulation to prevent pollution of groundwater.

The NM Environment Department should require Notices of Intent for Demonstration Projects on the agency website including both approvals and rejections of Notices of Intent.

Should there be spills of treated produced water during Demonstration Projects, the NM Environment Department should promptly and effectively take enforcement action against the violator to require correction and cleanup of spills.

New Mexico's clean water is already in jeopardy through rollbacks of clean water protections by the US Supreme Court. Any further risk to its bodies of water and groundwater must be most judicially prevented, especially in face of increasing NM clean water shortages.

Gravely concerned, Betsy Diaz

From: cyb8 hotmail
To: Jones, Pamela, ENV

Subject: [EXTERNAL] No to any toxins or waste into any water and environment

Date: Tuesday, May 14, 2024 9:26:02 AM

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

David Robertson From: Jones, Pamela, ENV To:

[EXTERNAL] Please do all you can to control the discharge of produced water. It is toxic waste and needs to be controlled as such. Discharge to ground and surface waters must be prohibited. We are called upon to be good Subject:

stewards of the earth. Thank you...

Date: Tuesday, May 14, 2024 12:31:53 PM

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

From: <u>James Stewart</u>
To: <u>Jones, Pamela, ENV</u>

Subject: [EXTERNAL] New Mexicans Must Demand Exacting Restrictions on Uses of Produced Water

Date: Tuesday, May 14, 2024 4:16:42 PM

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

So called "produced water" is in reality industrial waste of absolutely unknown content. We must not/not allow so-called "produced water" to be used in industry or agriculture, only if and when the oil and gas companies

- tell truthfully what's in the fracking water,
- the public is presented with serious, vetted scientific proof that such waste can be cleaned up,
- such "produced water" is purified of all noxious substances,
- the producers of such "produced water" pay for the complete clean up and purification,
- and no government subsidies to do so.

PERIOD!!

The health and well being of New Mexican citizens demand this and deserve this.

Most sincerely,

James Stewart

U.S. State Department Officer, Retired

From: Ona Porter

 To:
 Jones, Pamela, ENV

 Cc:
 Ann Lyn Hall; Juan Abeyta

 Subject:
 [EXTERNAL] Water

Date: Tuesday, May 14, 2024 1:47:55 PM

Attachments: <u>image001.png</u>

image002.png image003.png image004.png image005.png image006.png

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Ms. Jones.

Please express our plea to limit produced water to use in oil and gas fields ONLY! Both our surface and underground water sources and the health of New Mexican's must now and always be our collective highest priority.

For your consideration, my appreciation.

High regards,

Ona

Ona Porter, MA Founder Emerita & Clean Energy Leader

Mobile: 505-228-7506 Office: 505-217-2747

prosperityworks.net | @prosperityworks Support Our Initiatives | Leave A Legacy



From: RRoibal

To: <u>Jones, Pamela, ENV</u>

Subject: [EXTERNAL] Don"t let produced water contaminate our groundwater

Date: Tuesday, May 14, 2024 5:36:38 PM

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Ms. Jones,

I was born and raised in Santa Fe, New Mexico, where I live. My family has a ranch in San Ysidro, NM, where we have used the San Ysidro Acequia for over 90 years, using the water for gardens, orchards and livestock. I am a member of the NM Acequia Association.

I am extremely concerned about the use of produced water that has the high capability of contaminating our ground water, our rivers, lakes, and acequias. You should not allow produced water to be discharged into surface and groundwater resources. Please deny any requests to do this. You should also deny any requests to use produced water for industrial purposes, which can further contaminate our communities.

I need you to protect our environment and not let petro industries contaminate our water

Paz, Roberto Roibal From: Susan Gorman
To: Jones, Pamela, ENV

Subject: [EXTERNAL] In support of prohibition of produced water WQCC 23-84(R)

Date: Tuesday, May 14, 2024 1:08:30 PM

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

TO: Pamela Jones (pamela.jones@env.nm.gov)

FROM: Susan Gorman

SUBJECT: Docket WQCC 23-84(R)

DATE: May 14,2024

Pamela!

My name is Susan Gorman from Albuquerque.

I support prohibition of discharge of produced water to ground and surface waters of New

Mexico. Thank you, Susan Gorman

2222 Uptown Loop NE Apt 5207

Albuquerque, NM 87110

From: wkbarger@gmail.com
To: Jones, Pamela, ENV

Subject: [EXTERNAL] Please stop the discharge of produced water

Date: Tuesday, May 14, 2024 9:40:20 AM

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Ms. Pamela Jones

NM Water Quality Control Commission

RE docket number WQCC 23-84(R)

Dear Ms. Jones,

I strongly support the prohibition of the discharge of produced water to ground and surface waters in New Mexico.

It is hard to believe that our state has allowed produced water to be discharged for many years. In particular, the undisclosed chemicals used by the oil and gas industry certainly pose serious health risks to workers, the public, and the environment. I'm sure you recognize these risks, and ask the Water Quality Control Commission to act on prohibiting these chemicals and products the endangerment of New Mexicans.

Sincerely,

Walter Barger

May 13, 2024

pamela.jones@env.nm.gov

Subject: **WQCC 23-84(R)**

Please accept my comments regarding the New Mexico Water Quality Control Commission's rulemaking for the use of produced water outside the oil field.

The Problem

The Water Quality Control Commission must act to protect New Mexico's water resources for present and future generations, and for the ecosystems that it supplies. Such a protective approach requires conservation-minded actions to the regulation of New Mexico's diminishing surface and groundwater supplies for present and reasonably foreseeable uses.

In this case, the oil and gas industry must be held accountable for the toxic waste byproducts it produces. Produced water containing hazardous materials from oil and gas production should be designated as "hazardous waste", not "produced water".

"Produced water" is a misnomer. It contains toxic, radioactive fracking waste and should be regulated as hazardous waste, not as produced wastewater that can be reused.

The NMWQCC must safeguard our public welfare by protecting workers and our environment from exposure to the hazardous materials generated by the oil and gas sector.

Full Disclosure of Fracking Fluid Additives

A necessary first step to the potential reuse of produced wastewater outside oil and gas production wellfields is a requirement that oil and gas companies disclose all the chemicals used in their fracking fluid, the quantities used, and their fate once injected underground. Only 14% of the known chemicals detected in fracking waste have been adequately studied for their effects on human health.

NMED and the NMWQCC must not allow the oil and gas permittees to curtail a complete and comprehensive analysis of all fracking materials injected into the wellfield.

If permittees want to assert a proprietary privilege on the hydraulic fracking fluids injected, they should not be allowed to reuse produced water for any purpose. Nor should any permittee asserting a proprietary privilege receive state funding to treat or

sell produced water. These safeguards are necessary to protect human health, our environment, and scarce water resources for the reasonably foreseeable future.

The need for full disclosure of all the chemicals used by permittees in fracking fluid is essential to achieve these safeguards. Workers in the oil field and in fracking waste treatment plants, especially, need to be protected and informed of the dangers associated with exposure to fracking waste.

Need for Scientific Analysis of Fracking Fluid Additives

A 2022 scientific report co-authored by Dr. Pei Xu, the Associate Director for Research and Technology at the Produced Water Research Consortium cautions that research is limited and that no tools have been established to monitor unknown transformation compounds, or to understand the toxicity effects of the chemical interactions during reuse applications."

Of the more than 1,000 chemicals that are confirmed ingredients in fracking fluid, an estimated 100 are known endocrine disruptors, acting as reproductive and developmental toxicants, and at least 48 are potentially carcinogenic. Adding to this mix are heavy metals, radioactive elements, brine, and volatile organic compounds (VOCs), which occur naturally in deep geological formations and which can be carried up from the fracking zone with the flowback fluid.

Between 2012 and 2020 more than 1,200 oil and gas wells in six states were fracked using highly toxic per- and polyfluoralkyl substances (PFAS). These states are Arkansas, Louisiana, Oklahoma, New Mexico, Texas, and Wyoming. PFAS chemicals are linked to cancer, birth defects, high blood pressure during pregnancy, and other health harms. They have been nicknamed "forever chemicals" because of their inability to break down in the environment or in the bodies of living organisms.

Elevated levels of radium have also been found in produced water that can sicken oil field workers, treatment plant workers, and downstream populations. Bioaccumulation and biomagnification of radioactivity in the bodies of consumers can occur through the beef/milk pathway.

Intensive research is needed to provide scientific and technical knowledge to establish science-based regulations and develop well-informed permitting programs for the safe reuse of treated PW outside of oil and gas fields."

Dr. Pei Xu elaborates further:

" . . . PW is a new, non-traditional water source, and the water chemistry is complex with naturally occurring constituents and chemical additions during the

well stimulation process, water quality standards for different reuse applications should consider the known and unknown chemicals and the toxicological characteristics of produced water and treated produced water.

Until the science is clear on all chemical additives to the fracking fluids used to extract oil, the NM Water Quality Control Commission must prohibit the discharge, disposal, or reuse of treated or untreated produced water outside of the oil field. A prohibition is necessary to protect the public welfare and New Mexico's shrinking surface and groundwater supplies.

Additionally, the New Mexico Environment Department has already failed to enforce the prohibition against produced water spills. Since the start of Governor Lujan Grisham's administration just ten oil and gas companies self-reported more than 48,000 "accidental" spills and discharges of fracking waste, and they continue to operate with impunity. New Mexico regulatory agencies currently lack the capacity to adequately monitor the oil and gas industry on a regular basis and to carry out prompt enforcement actions to curtail unauthorized releases. Absent an infusion of funds for additional staffing, monitoring and enforcement actions, **New Mexico cannot reasonably be expected to control produced water reuse outside the oil field in a manner that is protective of our scarce ground and surface water resources, or the public health.**

Best Practices

Until the science is clear on all chemical additives to the fracking fluids used to extract oil, the NM Water Quality Control Commission must prohibit the discharge, disposal, or reuse of treated or untreated produced water outside of the oil field without exception. That is consistent with the most credible and best available science, the Water Quality Control Act and related regulations, and the New Mexico Constitution.

Following the full disclosure of ALL toxic chemicals used in oil and gas fracking fluids, it is very likely that the hazardous waste byproducts produced by the oil and gas industry will need to be isolated and monitored in perpetuity.

The best way to address the root cause of New Mexico's growing hazardous fracking waste problem is to begin the responsible phase-out of oil and gas production as New Mexico shifts to renewable energy sources. A transition away from non-renewable polluting sources of energy aligns with New Mexico's Energy Transition Act and should be supported by all state agencies and regulators

Submitted by:

L. Watchempino P.O. Box 407 Pueblo of Acoma, NM 87034 From: <u>Athena Christodoulou</u>
To: <u>Jones, Pamela, ENV</u>

Subject: [EXTERNAL] Comment at 5 today,(if possible), written comment for docket number WQCC 23-84(R)

Date: Monday, May 13, 2024 4:44:32 PM

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Commission members,

My name is Athena Christodoulou, an energy and environmental engineer, and I support New Mexico Environment Department's effort to **prohibit the discharge of produced water to ground and surface waters in the state**. Just because it was "named" produced water doesn't change the fact that it is TOXIC. This is ridiculous. The same industry which has polluted our air and water, now wants to foist their hazardous waste issue onto the state of NM lands which will eventually pollute our food and water. I call it environmental terrorism.

Make it Happen,

Athena Christodoulou, CDR U.S.N. (ret.)

505-507-1955

Engineering Duty Officer, Master Training Specialist Solargetic Designs LLC, Fossil Fuel Freedom designs,

Athena 2020 Solar tour in NM: YouTube

BSCE, MS Environmental Engineer, Professional Science Masters

Co-Founder, CSolPower LLC;

New Mexico Solar Energy Association (NMSEA) former board member and president

From: Allison Lemons
To: Jones, Pamela, ENV

 Subject:
 [EXTERNAL] docket #WQCC 23-84(R)

 Date:
 Monday, May 13, 2024 4:52:54 PM

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Dear Ms. Jones,

I support the proposed rule by the NM Environmental Dept. on the prohibition of the discharge of untreated and treated produced water to ground and surface waters in New Mexico, as long as the proposal is clear and straightforward.

The prohibition is necessary to protect the health of the public and the environment, as it has not been shown scientifically that produced water can be treated well enough to be rendered safe.

New Mexico is short of water as it is. We don't need the little we have to be polluted through the addition of produced water, treated or not.

It is up to the oil and gas companies to convince the public that their treated produced water would be absolutely safe. They have not done that, and cannot do it, so long as they maintain secrecy about any of the chemicals they use in their extraction methods.

Sincerely, Allison Lemons, mother and grandmother of New Mexicans 116 Sereno Dr. Santa Fe, NM

.

From: Anthe Kelley
To: Jones, Pamela, ENV

Subject: [EXTERNAL] Re: WQCC 23-84(R) in Support

Date: Monday, May 13, 2024 4:16:02 PM

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Dear Commission Administrator,

I am in support of the legislation to prohibit the discharge of produced water into the ground and surface water throughout the state of NM. This is a crucial move to protect people's and the soil's and water's health. Thank you for championing this protection. sensibility and cautionability.

I will stay tuned into this issue.

Thank you, again, for your care and protection.

All the best,

Anthe Kelley Regina, NM

--

--



Rev. Anthe A. Kelley, MAcCHM, LAc, Dipl. OM
Founder, Owner, Director
Akasha Acupuncture, Yoga + Herbal Medicine
DAcCHM Candidate,
M.A., Eastern Classics
Reiki Master/Teacher, E-RYT 500

www.akashastudiojp.com

Ministerial Services include: Ceremonies for all occasions, Weddings, Transition/Death/Dying Assistance, Spiritual Direction for full details: www.blossomingheartministry.com

From: Cassandra Brodean

To: Jones, Pamela, ENV

Subject: [EXTERNAL] WQCC 23-84(R)

Date: Monday, May 13, 2024 5:02:50 PM

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

My name is Cassandra Brodean, I'm from Albuquerque, and I support a **prohibition of the** discharge of produced water to ground and surface waters in New Mexico.

From: Charmeine Wait
To: Jones, Pamela, ENV

Subject: [EXTERNAL] re: docket number WQCC 23-84(R)

Date: Monday, May 13, 2024 6:21:42 PM

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Dear Ms. Jones,

Science has not demonstrated that produced water from fracking is safe. I support a prohibition of the discharge of produced water to ground and surface waters in New Mexico.

Sincerely, Charmeine Wait, Grant county From: <u>Cheryl Landgren</u>
To: <u>Jones, Pamela, ENV</u>

Subject: [EXTERNAL] Prohibit use of produced water Date: Tuesday, May 14, 2024 8:19:03 AM

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Hello, my name is Cheryl Landgren. I live in Albuquerque. I support the prohibition of discharging produced water into NM rivers and streams.

Thank you,

Cheryl Landgren

From: <u>Margaret Hadderman</u>
To: <u>Jones, Pamela, ENV</u>

Subject: [EXTERNAL] Please: NO discharge of produced water to ground & surface waters in NM!

Date: Monday, May 13, 2024 4:33:21 PM

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

This email pertains to Docket Number WQCC 23-84 (R). My name is Margaret Hadderman, of Silver City, New Mexico

I urge a prohibition of produced water to ground and surface waters in New Mexico. Produced water can contain a multitude of toxic ingredients: oil, grease, suspended and dissolved solids, heavy metals, radioactive materials, dissolved gasses, micro-organisms--you name it! Something like 1,000 known chemicals!

There are zero guarantees that this immensely toxic stew could be treated and made safe for humans and wildlife. Please regard the science and act to prohibit the discharge of produced water to ground and surface waters in our state. We're depending on you!

Thanks for taking my comment, Margaret Hadderman 1017 N. Santa Rita St. Silver City, NM 88061 From: Rich Schrader
To: Jones, Pamela, ENV

Subject: [EXTERNAL] Support for the prohibition of the discharge of produced water to ground and surface waters in New

Mexico

Date: Tuesday, May 14, 2024 5:51:41 AM

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Dear Ms. Pamela Jones,

I am writing to support the support NMED's prohibition of the discharge of produced water to ground and surface waters in New Mexico and ask that the authorization for reuse of produced water in industrial projects should be removed from the rule.

Prohibiting the discharge of produced water is necessary because there is insufficient scientific evidence demonstrating that produced water can be treated to New Mexico water quality standards that protect the public and the environment. Produced water is known to contain hazardous chemicals. Oil and gas industry attempts to weaken the proposed rule weaken the prohibition and allow discharges of treated produced water should be rejected.

The parts of the rule that authorize the reuse of produced water in industrial projects and the 14 definitions that are not used in the rule should be removed. The reuse of produced water in industrial settings is problematic because NMED has not put forth sufficient data on its safety. In addition, of the approximately 52 definitions in the rule, the 14 that are unused creates confusion. Several of the definitions lack context and imply that produced water can be released to the environment (for example "agricultural application"), and yet the rule prohibits such application. I ask the Commission to remove these definitions and the authorization to reuse produced water for industrial projects.

Thank you very much for your consideration of my requests and passing them on to members of the Commission!

Rich Schrader (he/him)

?

505-660-7928

www.Riversource.net

rich@riversource.net

From: Robinson Kurth
To: Jones, Pamela, ENV

Subject: [EXTERNAL] Produced water: docket number WQCC 23–84R

Date: Tuesday, May 14, 2024 8:48:27 AM

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

In reference to docket number: WQCC 23–84R Produced Water Discharge

Please keep health and safety standards high. Prohibit discharge of toxic produced water, especially to ground and surface water. This is toxic water and should not be casually reused or sold. Think about long-term health safety and environmental consequences. Thank you.

Robinson Kurth Sent from my iPhone Santa Fe resident
 From:
 Taylor Ward

 To:
 Jones, Pamela, ENV

 Subject:
 [EXTERNAL] WQCC 23-84(R)

 Date:
 Tuesday, May 14, 2024 7:54:40 AM

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

WQCC 23-84(R) I support a prohibition of the discharge of produced water to ground and surface waters in New Mexico.

Taylor Ward, we live in Eldorado at Santa Fe.

From: <u>Julie Sprott</u>
To: <u>Jones, Pamela, ENV</u>

Subject: [EXTERNAL] Comment pertaining to docket number WQCC 23-84(R)

Date: Tuesday, May 14, 2024 9:18:54 PM

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Dear Water Quality Control Commissioners:

I support a clear, straightforward prohibition against the discharge of untreated and treated produced water to ground and surface water.

A prohibition on the discharge of produced water is necessary because there is insufficient scientific evidence demonstrating that produced water can be treated to New Mexico water quality standards that protect the public and the environment. Industry proposals to weaken the prohibition and allow discharges of treated produced water should be rejected.

Authorization for reuse of produced water in industrial projects should be removed from the rule. Industrial projects, which are not volume or time limited in the proposed rule, carry increased risk of contamination of ground and surface water through spills, accidents, and inadvertent discharges to public wastewater systems, and there is insufficient evidence in the record that ongoing use of produced water in an industrial setting is safe.

I have serious concerns that the industrial projects will further entrench the oil and gas industry in New Mexico at a time when our top priority should be transitioning to clean and sustainable energy alternatives to protect our climate, watersheds, and communities.

Unnecessary definitions in the proposed rule should be removed. Many definitions are unnecessary because they are not included in the body of the rule and therefore serve no regulatory purpose. Definitions such as "agricultural application" and "food crop application" imply the rule permits discharge of produced water to land, which it does not. The unnecessary definitions of various land applications can lead to public confusion that the rule is not a prohibition on discharge to land.

The rule should require NMED to publish notices of intent (NOIs) for demonstration projects on the agency's website, including approved and rejected NOIs. If there are spills of treated produced water during demonstration projects, NMED should promptly and effectively take enforcement action against the violator and require immediate corrective action and cleanup.

Thank you for your careful consideration,

Julie Sprott 3113 Primo Colores Santa Fe, NM 87507 From: <u>betty kuhn</u>

To: Jones, Pamela, ENV

Subject: [EXTERNAL] docket number WQCC 23-84(R)

Date: Monday, May 13, 2024 9:49:40 AM

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

My name is Betty Kuhn. I'm from Santa Fe NM. I support a prohibition of the discharge of produced water to ground and surface waters in New Mexico.

Thank you, Betty
 From:
 Carol Pittman

 To:
 Jones, Pamela, ENV

 Subject:
 [EXTERNAL] WQCC 23-84(R)

 Date:
 Monday, May 13, 2024 11:58:14 AM

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Dear Ms. Jones,

I would like to register my opinion on the proposed rule referenced in the subject line:

"Produced water cannot be discharged to or disposed of on land because it can leach into aquifers from the surface, and contaminate ground water."

I once served on a committee dealing with produced water and it was clear then as it is now that there are dangerous chemicals in produced water, some of them not identified as preferred by the mining industry. Our drinking water is too precious to risk this kind of (permanent) contamination.

As you will see below, I live in an area entirely dependent on ground water.

Thank you for your attention, Carol Pittman Datil, New Mexico
 From:
 Cheryl CWB

 To:
 Jones, Pamela, ENV

Subject: [EXTERNAL] Re: Reuse of produced water

Date: Monday, May 13, 2024 3:23:57 PM

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

WQCC 23-84 (R)

On Mon, May 13, 2024 at 4:21 PM Cheryl CWB < cwb599@gmail.com> wrote:

This water must not be introduced to our ground water. It is toxic.

Please do not contaminate our dwindling sources of ground water for financial gain.

We cannot drink the money this might generate.

Cheryl Hastings.

Datil, NM

From: Glenn Wikle

To: Jones, Pamela, ENV

Subject: [EXTERNAL] Comment on WQCC 23-84(R) Oil well produced water rules

Date: Monday, May 13, 2024 9:13:50 AM

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Dear NMED,

Please strengthen protection from the health dangers created by transport, processing, and reuse of water produced from deep drilling operations in oil fields.

NMED should prohibit the discharge of produced water to ground, surface, or air.

Produced waters include dozens, if not hundreds, of unknown chemicals not disclosed by the well operators. It also includes toxic chemicals produced by reactions and pumped up from deep underground.

Produced water should never leave the oil fields. Its transport should be minimized to reduce the chances of toxic spills near where people live and work.

It should be carefully tracked and analysed for hazardous content.

Operators should be charged for the amount of water they use so as to encourage reduced consumption of the extremely limited fresh water resources in our state. Operators are granted permits to use our limited resources. They are not entitled to unlimited access and use.

Glenn Wikle Systems and Electrical Engineer Santa Fe, NM From: <u>Judy Brown</u>
To: <u>Jones, Pamela, ENV</u>

Subject: [EXTERNAL] Supporting prohibition of Produced water discharge

Date: Monday, May 13, 2024 4:06:27 PM

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

My name is Judy Brown, I'm from Los Ranchos, NM, and I believe we need to steward our water use with great care. I support a **prohibition of the discharge of produced water to ground and surface waters in New Mexico.** "Produced" water is wastewater and there is not enough known about its toxicity, so it's important that there not be spills or accidents in addition to controlling discharge through this necessary prohibition. Water is Life and when we protect it we are protecting ourselves, our children and all living beings.

Thanks, Judy Brown NM Interfaith Power and Light board member From: <u>Marita Prandoni</u>
To: <u>Jones, Pamela, ENV</u>

Subject: [EXTERNAL] docket number WQCC 23-84(R)

Date: Monday, May 13, 2024 9:56:57 AM

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Please urge the NM Environment Department to prohibit the release of produced water, treated or untreated, into ground and surface water in New Mexico.

As I'm sure your scientists are aware, this water contains hydrocarbons, heavy metals and salt concentrations up to seven times more concentrated than that of sea water and can be radioactive. The fracking industry uses "proprietary" chemical additives specifically to hide their polluting practices from the public.

Please do not allow oil and gas operators and factory farms to put the public health and aquatic ecosystems at risk while protecting their industries' profit margins. You need only to look at the example of Dimock, PA, where Cabot Oil and Gas poisoned the town's drinking water and was forced to pay millions in fines and deliver safe drinking water to those who had been harmed for 75 years.

Marita Prandoni

 From:
 Melissa Houser

 To:
 Jones, Pamela, ENV

 Subject:
 [EXTERNAL] WQCC 23-84(R)

 Date:
 Monday, May 13, 2024 4:08:33 PM

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

My name is Melissa Houser, I'm from Glorieta, NM. I support a prohibition of the discharge of produced water to ground and surface waters in New Mexico. A prohibition on the discharge of produced water is necessary because there is insufficient scientific evidence demonstrating that produced water can be treated to New Mexico water quality standards that protect the public and the environment.

Sincerely, Melissa Houser 186 Glorieta Mesa Rd, Glorieta, NM 87535 missa.houser@gmail.com
 From:
 NORMAN R NORVELLE

 To:
 Jones, Pamela, ENV

 Cc:
 Carolyn Norvelle

Subject: [EXTERNAL] Produced Water Operator Certification

Date: Monday, May 13, 2024 2:14:30 PM

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Operation Certification for Produced Water Treatment Docket Number WQCC 23-84(R)

Hello Pamela Jones,

My name is Norman Norvelle, M.S. and I am from Farmington, NM. Produced Water (oil & gas wastewater) can be a complex and toxic waste. Treatment of this oil & gas wastewater will most probably require a complex treatment and disposal program. For a municipal or domestic system an operator certification is required for both drinking water and wastewater (sewage) treatment operations. In my opinion, there should be an operator certification program for the treatment of produced water. This program could be developed through local colleges or by a correspondence or an on-line training course. A certification program would eliminate many mistakes that may be caused by operator error and ensure better protection of the environment. Please consideration this suggestion for the operation and disposal for a produced water treatment program.

Norman Norvelle, M.S., Registered Environment Health Specialist Emeritus, NM Class IV Water Operator, NM Class IV Wastewater Operator.

Senior Chemist and Consultant for over 20 years with San Juan Generating Station and El Paso Natural Gas Company. Over 10 years public health and environmental health inspector and Safety Consultant with State of NM.

Sent from Mail for Windows

From: Patricia Sheely
To: Jones, Pamela, ENV

Subject: [EXTERNAL] Docket number WQCC 23-84(R)

Date: Monday, May 13, 2024 11:13:04 AM

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

My name is Patricia Sheely, I live in Gallup, New Mexico, and I support a prohibition of the discharge of produced water to ground and surface waters in New Mexico.

As a retired dietitian, I am concerned about the health of our children. The health and well-being of children begins with the prenatal health and care of the mothers and continues through infancy, childhood, and adolescence. Their bodies and brains are affected by toxic pollutants not only in the air, but in the food that they eat and the water that they drink.

Produced water from oil and gas drilling and production contains many known and unknown toxic pollutants that are harmful to human health and the environment. These chemicals have the potential to cause reproductive defects, developmental delays, and many forms of cancer. There is insufficient data to show that these chemicals can be removed from produced water. In fact, since the chemicals used by the industry are proprietary, we don't even know all the chemicals that we should test for. There could be as many as 700 different chemicals in produced water.

The availability of clean water is critical for the future of New Mexico. Our aquifers are not being replenished. We should not take any chances of contaminating our aquifers. We should be mindful that it is not in our best interest now or in the future to contaminate our waterways which support aquatic life or to contaminate our land from which we grow food.

I am very concerned about the potential for spills from demonstration projects. Can adequate "guardrails" be put in place? Cleanup after the fact is easier said than done. How can we know that unknown chemicals are cleaned up?

I find the term produced water misleading. It gives the impression that the oil and gas industry is returning clean water to the environment and hides the fact that the industry is using water, a precious resource.

Thank you for the opportunity to express my concerns about produced water.

Patricia Sheely

604 Jeff King Street

Gallup, NM 87301

(505)722-7564

patsheely@gmail.com

From: Walter Gerstle
To: Jones, Pamela, ENV

Subject: [EXTERNAL] I support a prohibition of the discharge of produced water to ground and surface waters in New

Mexico

Date: Monday, May 13, 2024 8:07:17 AM

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Dear Water Quality Control Commission,

My name is Walter Gerstle. I live in the South Valley of Albuquerque, and I support a prohibition of the discharge of produced water to ground and surface waters in New Mexico.

Our lands and waters are sacred and should not be polluted with fracking waste. Sincerely,

Walter Gerstle

Walter Gerstle, Ph.D., PE Registered Professional Engineer 1709 Neat Lane SW Albuquerque, NM 87105

Phone: (505)382-2328 Email: gerstle@unm.edu From: Wendy Volkmann
To: Jones, Pamela, ENV

 Subject:
 [EXTERNAL] WQCC 23-84(R) I.

 Date:
 Monday, May 13, 2024 2:02:55 PM

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Dear NM Environmental Department,

As a New Mexican, I value clean water for drinking, bathing, playing, and nourishing all NM people, plants, animals, and lifeforms.

The current proposed Wastewater Reuse Rule must be strengthened. It is sadly inadequate to protect public health and the environment.

Our water resources should be carefully and stringently regulated to safeguard our health.

Hazardous waste should NOT be used for agricultural or drinking purposes. That is the epitome of unsafe!

The proposed rule lacks comprehensive scientific protocols: tracking, reporting, and thorough analysis ensuring produced water treatment works as hoped. The rule also fails to properly classify waste generated by produced water treatment, and, instead, treats produced water waste as exempt from hazardous water management requirements.

I urge the Department to enthusiastically require full disclosure of the chemical and radioactive composition of produced water, thereby protecting public safety. This information should not be "proprietary;" it should be public so regulators can protect people, our land, life, and water.

Sincerely, Wendy Volkmann Lamy, NM From: Ann Williams
To: Jones, Pamela, ENV

Subject: [EXTERNAL] Oil and Gas waste water **Date:** Monday, May 13, 2024 8:00:53 AM

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

To the Water Quality Control Commission

Water is a very valuable resource in New Mexico. The time comes when there isn't enough water for our residents we definitely don't need to have what little water there is to be contaminated by sources that need to be phased out to protect our environment. Please consider the need for safe water in New Mexico when you make your decisions.

Sincerely, Ann Williams 87120 From: <u>Catherine salveson</u>
To: <u>Jones, Pamela, ENV</u>

 Subject:
 [EXTERNAL] Docket no. WQCC 23-84(R)

 Date:
 Monday, May 13, 2024 3:55:00 AM

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

My name is Karen Keeney, from Bernalillo NM.

I strongly support prohibition of the discharge of any produced water to ground and surface waters in New Mexico.

Please protect our vital resources, and our health and safety now.

Thank you.



May 13, 2024

State of New Mexico
Water Quality Control Commission

WQCC Commissioners,

The Economic Development Corporation of Lea County appreciates the opportunity to comment on the Proposed New Rule 20.6.8 NMAC (Ground and Surface Water Protection-Supplemental Requirements for Water Reuse) petition by the New Mexican Environment Department. Water is a precious and limited resource within our state. We are greatly aware of the need to conserve our freshwater resources; however, water is a critical resource in growing both our communities and economic viability. Our area has a surplus of non-potable and treated produced water that we could use for this purpose.

The March 20th amended petition and rule will greatly hinder the economic growth and opportunities within our region and within the state. Limiting or banning the use of treated produced water limits the ability to use a byproduct of significant industry in our area for the benefit of our residents. This water can be used for many non-potable opportunities that currently depend on freshwater resources. Banning the use of these types of water forces arid communities to use precious freshwater for non-consumptive actions, such as construction, road maintenance, industrial uses, etc., instead of treated produced water, which is abundant. By switching to appropriately cleaned re-use water for non-potable uses we conserve freshwater resources for higher needs. Several communities within the state are currently hindered by limited freshwater resources which stunts growth in population and diversifying their economies.

Productive regional growth will be greatly hindered by this proposed rulemaking. Industry is rapidly growing in our area. With this rapid growth, we have an abundance of produced water which is currently an untapped economic resource. At the Economic Development Corporation of Lea County, we are planning for industrial and commercial growth in our area with land, governmental, and economic resources. Utilization of treated water should be one of the resources available for use.



It is a key element in bringing growth through water treatment facilities, non-consumable agricultural projects, use of minerals and metals derived from the produced water, and employing the water in manufacturing and industrial uses. These economic opportunities will continue to go to Texas if we cannot offer the possibility of capturing this wealth in our state. If we do not allow re-use applications, then the communities who are wanting to engage in these ventures are forsaken of their own authority and autonomy in policy decisions.

Sincerely,

Jennifer Grassham

President & CEO

Economic Development Corporation of Lea County

Jennifer@edclc.org

Ladies and gentlemen of the Commission,

My name is Elaine Cimino, director of Common Ground Rising and a resident of Rio Rancho, New Mexico. Written comments have been provided.

I stand before you today to strongly oppose the fracking waste reuse rule.

The proposal relies on a flawed model that has already proven disastrous. For example, a desalination demonstration project in 2007 revealed "known" highly contaminated raw brine. The project's waste had significant consequences such as the dumping of 300 tons of TENORM radioactive waste at the Municipal Landfill, followed by fluid waste being dumped into the Rio Rancho wastewater system, likely ending up in the Rio Grande.

The impact on our environment is visible even from space, with a caustic water irrigated pivot and agricultural damage to surrounding soil.

Toxic fluids from radioactive, caustic wells were sprayed on surrounding roads for dust control, exposing the public to hazardous contaminants like TENORM/radium and arsenic, with approvals from NMED, this project was under a corrective action order due to its toxicity and spillage.

We were denied by NMED a hearing before this board on the toxic dumping, it now appears the reason why was that there were undisclosed plans to create a hazardous waste loophole.

The current proposal is a ticking time bomb, allowing more dangerous demo projects, shifting the burden and expense of protective legal action, from the health and economic harms, onto communities. Instances of waste dumping, both on and off the oilfield, are on-going, unchecked, including the spread of radioactive waste.

We refuse to be sacrificed for the profits of the industry.

We cannot continue to rely on industry self-reporting or leave decisions solely to the discretion of the NMED Secretary. Stronger rules are needed to protect public health and the environment.

I urge the commission to reject this proposal and prioritize community well-being over corporate interests.

Thank you.

Elaine Cimino

907 Nyasa Rd Se

Rio Rancho NM 87124

505 6049772

From: Ken Gallard
To: Jones, Pamela, ENV

Subject: [EXTERNAL] docket #WQCC 23-84(R)

Date: Monday, May 13, 2024 7:33:18 AM

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Dear Ms. Jones:

I am writing to you to express my concerns as the Water Quality Control Commission prepares to review new rules by the New Mexico Environment Department to provide forward guidance on the monitoring of "produced water" as by-product of the oil and gas extraction process.

New Mexico already has serious challenges relating to water quality and quantity in the face of both climate changes as well as population demands. At a time when it is imperative for public safety and health to be transitioning from fossil fuels to more sustainable energy generation, it is ever more important that we rein in the impactful uses of water supplies. Here in Taos County, much of the population relies on both ground and surface waters for domestic and agricultural uses; we ourselves have relied on a private well as do all of our neighbors. Indeed, much of the rural New Mexico population is in similar circumstances. The oil and gas extraction industry must be held to stringent environmental standards that safeguard these waters that are necessary to all life and the quality of public health at-large. Stringent rules must be in place to defend these waters. As such any discharge of "produced water" into ground or surface waters is not at all acceptable. The known (and many unknown) components of these by-product waters have serious health consequences for people and animals of all ages. Again...this is totally unacceptable.

In any circumstances where such by-product waters are released, either knowingly or unknowingly, strict and stiff penalties must be in place to hold those responsible accountable. Public health and well-being is at stake. There is no room for error in this kind of high-risk situation.

Thank you for your concern in addressing this most important public health issue.

Sincerely,

Ken Gallard

PO Box 460

Arroyo Seco, NM 87514

Hello, my name is Lauri Costello; I'm a physician living in Las Cruces. Please regulate the use of Produced water *outside* Oil and Gas operations and also remove "demonstration and "Industrial" uses from the legislation.

In medicine we appreciate the Precautionary Principle which requires that public exposure to anything...procedures, chemicals, medications...demands prior proof of safety. The principle does not apply to our food or water supply or to our household products. Many for-profit corporations use the same playbook perfected by the tobacco industry: deny the known harms, market the dangerous but profitable substance, and pay fines when necessary since they represent only a tiny portion of already-realized profits.

From the beginning, waste water has been an issue that has been ignored by the Oil and Gas industry given inadequate enforcement of weak regulations. They deny the toxic chemicals in fracking fluid, even when researchers reveal them. The shear volume of wastewater, with hundreds of known toxins, should be prohibitive. New Mexico continues to be a sacrifice zone for the fossil fuel boom that saw the Permian Basin, in 2022, named the highest producing oil field on the planet...the same planet that is being destroyed by our use of fossil fuels.

The PFAS chemicals that are already in most Americans' bloodstreams are endocrine disruptors that are present in fracking fluid. Since the EPA is not requiring testing and cleanup of our public water supply until 2025, fracking will continue to reap huge profits while poisoning us and the planet that used to sustain us. Please use this opportunity to prohibit further discharge of Produced water, whether it is treated or not, to our surface OR ground water.

Industry is also requesting a green light for "demonstration" and "Industrial" uses of Produced water; this is a political stunt. These uses are speculative at best and have NO EVIDENCE of safety. Please red-line them. Also, please strike unnecessary definitions that are not addressed in the rule...another political stunt designed to confuse the public.

The vast quantities of precious water, fresh or reused, necessary for Oil and Gas operations guarantees a worsening of the wastewater problem, which is already irreversible due to its shear volume. Please prioritize the health of living beings, which are 70% water, and the health of the planet which is also 70% water. Please protect us from the Oil and Gas industry's dirty, deadly secret...it's no secret at all!

Thank you.

From: <u>liz bessin</u>

To: <u>Jones, Pamela, ENV</u>

Subject: [EXTERNAL] Docket number: WQCC 23-84(R)

Date: Monday, May 13, 2024 12:12:02 AM

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

I support a prohibition of the discharge of produced water to ground and surface waters in New Mexico.

Protect human health and the environment.

Thank You, Liz Bessin Santa Fe, NM From: shconra@gmail.com
To: Jones, Pamela, ENV

Subject: [EXTERNAL] Comments regarding docket number WQCC 23-84(R)

Date: Sunday, May 12, 2024 11:04:24 PM

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Members of the WQCC —

I understand the Commission will consider formalizing the regulation of demonstration projects for the use of produced water outside of the oil field. I would like to offer some technical comments regarding the use of produced water.

I have a PhD in groundwater hydrology from New Mexico Tech and I worked at Sandia Labs for 26 years. I worked on safe radioactive waste disposal, a range of groundwater cleanup projects, and EPA-funded research.

I want to make two important points:

- We need unambiguous quantitative cleanup standards and we need them up-front before we get too far down the road to turn back.
- Treatment of this water for any uses outside the oilfield is not even remotely economically viable.

Let's recap the produced water situation.

Oil companies use fresh water to extract petroleum from the ground and they're intending to give us back treated water of significantly diminished quality.

In fracking, fresh water, sand, and proprietary additives are injected.

And what comes out?

- petroleum
- the injected water
- the proprietary additives
- and lots of "connate water". This is extremely saline water that existed with the petroleum in the formation. This water is often significantly more saline than ocean water.

This water has also had thousands of years to have petroleum components such as BTEX* dissolve into it. These are carcinogenic chemicals regulated at very low MCLs under the Clean Water Act.

This water has also dissolved radionuclides and other solutes from the rock.

So clean water goes in and severely contaminated water comes out.

Counterintuitively, it's the salt — the most mundane component — that's the most costly to remove. And unless the salt is almost entirely removed, this water isn't suitable for almost any applications. If it were economically viable to remove this salt, desalination of ocean water would be quite common. Desalination isn't common because it's just too expensive.

Let's say this water could be cleaned up completely. With current technology, there's absolutely no way the water can be sold for anywhere near the cost of treatment. It's a losing proposition.

If the state is paying for treatment and selling the water at a loss, that amounts to a HUGE unwarranted subsidy to the oil companies.

If the oil companies are footing the bill, they'll almost certainly find reuse, deep injection, or evaporation to be less expensive.

What we need are science-based, quantitative standards akin to the National Primary Drinking Water Standards. These water quality standards need to be met before the water could be reused. And these standards need to be adjudicated up front.

Thank you for your consideration,

Stephen Conrad PhD Algodones, NM 505-900-4546

* Benzene, toluene, ethylbenzene, and xylene